

## Product datasheet for **SC331484**

### UCP4 (SLC25A27) (NM\_001204052) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** UCP4 (SLC25A27) (NM\_001204052) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** UCP4  
**Synonyms:** UCP4  
**Vector:** pCMV6-Entry (PS100001)  
**Fully Sequenced ORF:** >SC331484 representing NM\_001204052.  
Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
ATGTCCGTCCCGGAGGAGGAGGAGGCTTTTGCCGCTGACCCAGAGATGGCCCCGAGCGAGCAAATTC
CTACTGTCCGGCTGCGCGGCTACCGTGGCCGAGCTAGCAACCTTTCCCCTGGATCTCACAAAACTCGA
CTCCAAATGCAAGGAGAAGCAGCTCTTGCTCGGTTGGGAGACGGTCAAGAGAATCTGCCCCCTATAGG
GGAATGGTGCACAGCTCTAGGGATCATTGAAGAGGAAGGCTTTCTAAAGCTTTGGCAAGGAGTGACA
CCCGCCATTTACAGACACGTAGTGTATTCTGGAGGTCGAATGGTCACATATGAACATCTCCGAGAGGTT
GTGTTTGGCAAAAGTGAAGATGAGCATTATCCCCTTTGAAATCAGTCATTGGAGGGATGATGGCTGGT
GTTATTGGCCAGTTTTAGCCAATCCAACCTGACCTAGTGAAGGTTGAGATGCAAAATGGAAGGAAAAGG
AAACTGGAAGGAAAACCATTTGCGATTTCTGGTGTACATCATGCATTTGCAAAAATCTTAGCTGAAGGA
GGAATACGAGGGCTTTGGGCAGGCTGGGTACCCAATATACAAAGAGCAGCACTGGTGAATATGGGAGAT
TTAACCACTTATGATACAGTGAACACTACTTGGTATTGAATACACCACTTGAGGACAATATCATGACT
CACGGTTTATCAAGTGATCTGGTCGGATCTACAAGGCCATCCAATGA
```

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001204052  
**Insert Size:** 738 bp  
**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).  
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).



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**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_001204052.1](#)

**RefSeq Size:** 2526 bp

**RefSeq ORF:** 738 bp

**Locus ID:** 9481

**UniProt ID:** [O95847](#)

**Cytogenetics:** 6p12.3

**Protein Families:** Druggable Genome

**MW:** 27.2 kDa

**Gene Summary:** Mitochondrial uncoupling proteins (UCP) are members of the larger family of mitochondrial anion carrier proteins (MACP). UCPs separate oxidative phosphorylation from ATP synthesis with energy dissipated as heat, also referred to as the mitochondrial proton leak. UCPs facilitate the transfer of anions from the inner to the outer mitochondrial membrane and the return transfer of protons from the outer to the inner mitochondrial membrane. They also reduce the mitochondrial membrane potential in mammalian cells. Tissue specificity occurs for the different UCPs and the exact methods of how UCPs transfer H<sup>+</sup>/OH<sup>-</sup> are not known. UCPs contain the three homologous protein domains of MACPs. Transcripts of this gene are only detected in brain tissue and are specifically modulated by various environmental conditions. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Feb 2011]

Transcript Variant: This variant (3) has multiple differences, compared to variant 1. These differences result in a distinct 3' UTR, compared to variant 1. The encoded protein (isoform 3) has a distinct C-terminus and is shorter than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.